Monitoring Data Record

Project Title: R-2417BA (Sites 14 and 22) COE Action ID: 2002-2-0899
Stream Name: UT Bull Run DWQ Numbers: 001432
City, County and other Location Information: Lee County, US 421-NC 87 Sanford Bypass from East of US 1-15-501 to East of SR 1521
Date Construction Completed: Site 14 (May 2003) & Site 22 (April 2004)
Monitoring Quarter: (8) of 8
Ecoregion: 8 digit HUC unit: 03030004
USGS Quad Name and Coordinates:
Rosgen Classification:
Length of Project: 144' Urban or Rural: Rural Watershed Size:
Monitoring DATA collected by: M. Green and J.Young Date: 2/1/08
Applicant Information:
Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Rd. Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level (1) ~~2~~ ~~3~~
Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: The permittee will visually monitor the vegetative plantings on all mitigation streambanks to access and insure complete stabilization of the mitigation stream segments. This monitoring will include adequate visual monitoring of planted vegetation quarterly for a minimum of two years after final planting, and appropriate remedial actions (e.g., replanting, streambank grading, ect.). If within any monitoring year, bank stabilization is not acceptable as determined by the Corps of Engineers, and remedial action required by the Corps of Engineers is performed, the two year monitoring of the affected portions of the stream will begin again.

Section 1. PHOTO REFERENCE SITES

Total number of reference photo locations at this site: Site 14: 1 photo point, 2 photos at this photo point location. Site 22: 2 photo points, 2 photos at each photo point location.

Dates reference photos have been taken at this site: 5/1/06, 8/24/06, 11/28/06, 2/7/07, 5/21/07, 8/7/07, 11/2/07, 2/1/08

Individual from whom additional photos can be obtained (name, address, phone):

Other Information relative to site photo reference:

If required to complete Level 3 monitoring only stop here; otherwise,

Section 2. PLANT SURVIVAL
Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action:

ADDITIONAL COMMENTS: Vegetation is dormant at this time. Seedlings noted on the streambank and in the floodplain consisted of black willow, silky dogwood, willow oak, water oak, tulip poplar, alder, white oak, river birch, green ash, and red maple. Other vegetation noted consisted of *Juncus* sp., cattail, lespedeza, fennel, sedge, pokeweed, jewelweed, goldenrod, woolgrass, briars, and various grasses. NCDOT proposes to discontinue plant survival monitoring.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

Site 14 stream relocation at Sta. 133+90 LT. has a slight headcut where the relocated stream ties back to the existing stream. The stream relocation is stabilized.

Site 22 stream relocation at Sta. 146+00 RT. has two cross vanes that were constructed without filter fabric per the plans. Water is currently flowing through the structures. There has been some localized erosion but the site has stabilized with vegetation. NCDOT proposes to discontinue channel stability monitoring at Sites 14 and 22.

Date Inspected	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type	Crossvanes @ Sta. 146+00 RT.	Stream @ Sta. 133+90 LT.			
Is water piping through or around structure?	Water is piping through crossvanes				
Head cut or down cut present?	Slight Headcut	Slight Headcut			
Bank or scour erosion present?					
Other problems noted?					

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

Site 14

Photo 1

Photo 2

Site 22

Photo 1

Photo 2

Photo 3

Photo 4